CORRESPONDENCE.

The Functions of the A. O. U. Committee on Nomenclature.

EDITOR OF 'THE AUK':

Dear Sir: The appearance, in your July issue, of the Sixteenth Supplement to the A. O. U. Check-List, and of comments in your 'Notes and News' column relative to the uses of the A. O. U. Committee, prompt me to give expression to some ideas which have doubtless occurred independently to not a few lay students of North American birds.

If I infer correctly, the comments in question were written by a member of the Committee; hence they are in a measure an avowal of purpose, and to a degree authoritative. From these comments, and from the recent output of the Committee, we may safely adduce the following as being the main, if not all of, the functions of the Committee.

(1) To decide upon a system of groupings, that is, upon what genera and higher groups are to be recognized, and upon the sequence of these and the contained species. (2) To decide upon cases of nomenclature, where from various contingencies the correct name of the species may be in more or less doubt. (3) To determine the boundaries of 'North America,' and to pass upon the claims for inclusion in the North American list, of various vagrant species, so rare that the evidence of occurrence must be examined and weighed. (4) To decide as to the merits of the various finely differentiated subspecies which are being named by systematic students, both as to the validity of the characters assigned, and as to whether the degree of difference is sufficiently well marked to warrant recognition in the official Check-List.

The great value of a committee of arbitration in the first three of these functions is beyond any possibility of dispute. The personnel of the Committee as now constituted is of that high grade of judicial ability and long experience which brings confidence in their rulings in these respects. For these functions alone the existence of such a committee is fully warranted. The chief complaint that I can seriously offer in these regards is that in the recent Third Edition of the Check-List the matter of presenting a modern system of classification was shirked altogether, on the plea (flimsy, was it not?) that some inconvenience would result! This was a grievous error, which every bona fide student of ornithology deplores.

A further disappointment was met, when the Sixteenth Supplement came to hand lacking a single nomenclatural ruling—this being preeminently the service which the Committee is well fitted to render. Numerous proposals of changes in generic and specific names have lately been made. Undoubtedly many names previously in use in the Check-List require replacement upon perfectly good grounds. And an authoritative decision in each case, not long delayed, is a desideratum of the active student of birds. Postponement of such action is provoking. While in such matters as the above one may accept the conclusion of some one systematic worker, the elements in each case are of such a nature that a properly qualified committee of several members can undoubtedly render a correct ruling in a greater number of cases than can one man. Hence the demand for committee action, over that of any one individual.

Examination of the Sixteenth Supplement shows that of proposed additions to the Check-List from the category of vagrant species, four were accepted and three were rejected. In this function (number 3) the rulings of the Committee are gladly accepted. They have considered the evidence offered in each instance, and have rendered judgment.

Further scrutiny shows that in the Sixteenth Supplement, function number 4 was exercised in 34 cases. Thirteen newly proposed subspecies were accepted, 19 were rejected, and two proposed cancellations were rejected. It is this function that, to my mind, has been unsatisfactorily performed. Ha! I can hear the scornful remark from at least seven directions: The splitter is sore; his pet subspecies were turned down! Granted; but let me try to discuss the problem dispassionately, and may my readers consider the matter in like mind.

Up to the present time the Committee has with more and more difficulty tried to meet two totally different ideals in the matter of including subspecies in its Check-List. The trained student of speciation, whom certain thoughtless ones attempt to ridicule by the term 'splitter,' has earned the ability to distinguish characters of phylogenetic value from the host of others which are the confusion of the amateur. This kind of specialist finds it more and more in his power to discriminate the lesser differentiated forms; his senses, his tools for measuring, are becoming refined, and he can discriminate differences which the dilettante cannot. Liken the development of the professional systematic ornithologist to that of the trained microscopist, in whatever field. Would anyone for a moment entertain seriously the dictum that any organisms, which future increase in precision on the part of both the individual and his instruments enable him to discern, should be deemed beneath notice, "not worthy of recognition by name," just because the amateur finds difficulty in seeing them?

Arguments along this line ought to be unnecessary in defense of the systematic ornithologist. The difficulty comes when the Committee is confronted with the results of his refined work. Its action has been anything but consistent. Sometimes the Committee accepts the results of the systematist's work in their entirety; occasionally the whole thing is discarded; and in the last supplement forms are 'accepted' and 'rejected' in hit or miss fashion, to the wonderment of the beholder who happens to be posted in any of the groups affected.

Evidently the Committee feels that it cannot go to the limit. The populace will not stand for it!

For there is, on the other hand, the vast majority of amateur bird students who are confused by the multiplicity of names. Yet they require a reference list of North American birds. Many of the subspecies already

in good standing on the Check-List represent forms far beyond their limited powers of discrimination. They are confused by differences due to age, sex, season, individual variation, and such adventitious factors as wear and fading. This unpopularity of the subspecies is evident in the way they are treated in most popular works on ornithology. They are either disposed of in diamond-type footnotes or appendices, or they are omitted altogether. Not infrequently such opprobrious terms are introduced as 'alleged,' 'extremely slight,' 'subjective,' etc. Yet ninetynine percent of bird students will resent most vehemently any intimation that their powers of discrimination are limited!

The poor Committee has the amateur on the one hand and the specialist on the other. And neither of these constituencies is satisfied with the present rulings in the Check-List. The term ornithology is a mighty broad one; the phases of the study are many. A man may become an eminent ornithologist in psychology, in anatomy, in classification in the large, in economics — and not have need of any particular ability or knowledge in the technique of species-discrimination. The amateur, as far as subspecific discriminative ability is concerned, constitutes practically all of the Associates of the A. O. U., surely a majority of the Members, and not a few of the Fellows.

Why does the Committee discommode this great majority by 'accepting' as many subspecies as it does? Is it fair to the conscientious student of speciation to maltreat the results of his work as instanced in the genus *Dryobates* in the Sixteenth Supplement?

It seems clear, upon any basis I can think of, that the A. O. U. Check-List with its supplements is of late failing markedly in its usefulness. This is because of the Committee's unhappy attempt at striking a mean between the demands of amateur and specialist. The interests of one or the other should be sacrificed; and as the amateur is in the vast majority, the Check-List should be remodeled to meet his requirements. An expeditious way to do this would be to eliminate all subspecies. There would thus be but one name for the Robin from the Atlantic to the Pacific, only one Song Sparrow and one Horned Lark in all North America. A statement could be appended, wherever appropriate, to the effect that there is geographic variation within the range, birds from desert regions being small and pale, those from the northwest being large and dark; etc.

I venture to say that such a consummation would be hailed with delight by the rank and file of bird students, if not by every one. The interpolation of subspecies in small type as in the Third Edition, is a confusion. As stated before, the subspecies problem as now handled is unsatisfactory to practically all concerned. Such a working list of North American birds should accord with the most modern findings in classification, nomenclature and geographic distribution. The Committee would find good use for its talents in keeping such a list up to date.

Now, I am not for one moment advocating cessation of activities on the part of the student of speciation. He must pursue his investigation to the farthest limit made possible by his experience and keenness. And may his ability become sharpened until he can distinguish seven Song Sparrows where but one is now known! Furthermore, if one degree of differentiation requires a name, so does every other, even down to the finest discernible. The systematist will continue to provide names for the subspecies he discovers.

The futility of any committee attempting to pass judgment upon the findings of the specialist here becomes obvious. A very good reason is given in the editorial comments alluded to, though couched in an unfortunately disparaging tone: "The specialist working over a group of birds constantly for weeks at a time, unconsciously magnifies the differences which he finds between birds from areas, which he has reason to think, ought to yield separable geographic races." To express the idea with better respect for the judgment of the specialist, it is the worker in a particular group—the man who has scrutinized all available material with minute attention to detail, the man who has become proficient in picking apart the multifarious peculiarities between individual specimens and series, one who can appreciate mass effect—it is that man who is by far the best fitted to render verdicts as to the existence of subspecies.

It would be foolish for me to tackle the Hummingbirds of Middle America, even with the largest museum series of skins at hand, with the expectation of giving within seven days an opinion as to the validity of certain proposed forms. Who would place any reliance upon my conclusions? I would n't! If it is ridiculous for one person to attempt to pass judgment on a few subspecies of an unfamiliar group with but a few days study, it is logically seven times as ridiculous for seven men to make such an attempt, especially when 34 cases representing 18 genera are to be considered! There is no use making any bones about it—there is too much good evidence of the failure of the Committee in rendering just verdicts as between 'rejected' and 'accepted' subspecies in the Sixteenth Supplement. It is beside the object of the present communication to go into detail in this regard.

I do not mean disrespect towards any one of the Committee members, and certainly no one will arraign me on that score. All of them are busy men. At least three are ordinarily strenuously occupied with other matters than subspecies of birds. They give of their time generously; but who will maintain that in function number 4, it is worth their while from the standpoint of either the amateur or the specialist?

Nor am I advocating that there be no longer an official Check-List of North American birds to include all recognizable subspecies. On the contrary, this is an eminently desirable thing, to constitute a record of achievement in research in avian speciation. I have no doubt, too, but that a large number of non-specialists will always be interested in such results, enough to well warrant its publication.

I do not, however, believe that any committee could handle such a proposition. Rather, let there be a systematic editor appointed by the president of the A. O. U., one qualified through his accuracy in handling

scientific names typographically, as well as by attainments in his own field. Let him be located, preferably, at Washington, because of the library and museum facilities there. His task should be, not to pass judgment upon any forms not in his own special group or groups, but to unify the whole output. This should consist of a co-ordinated set of contributions each from the specialist most familiar with the group concerned. It may well be, then, that but a single person shall stand as authority for the status of forms in any one group; or one student may be responsible for several groups which he may have worked in. The danger of uneven treatment throughout the entire production could not of course be wholly eliminated, because of variability in personal ability or standards, and this in spite of careful editing. But the results would surely be far nearer the truth than those exemplified in the Sixteenth Supplement.

To summarize: the present Check-List, especially as including the last supplement, is unsatisfactory to both the amateur and the specialist in respect to the subspecies problem. It is suggested that a new Check-List, with subspecies omitted altogether, would be hailed with appreciation by the great majority of bird students, with whom such an abridged list would meet all requirements.

The Committee, as at present constituted, has all the qualifications to enable it to compile and keep up to date such a Check-List. Such a list of *species* should prove even more popular than the present one.

It is further suggested that an entirely distinct publication, though second in importance, would justify itself, enumerating the results of the specialist's studies to the very limit to which his perceptions allow him to proceed. But it is contended that no committee can have the qualifications in either time or ability, to pass judgment upon all the proposed cases. Rather should such a technical list be a carefully edited compendium of contributions from all specialists of recognized standing, each treating of the group or groups in which he has personally worked.

Respectfully submitted,

JOSEPH GRINNELL.

Museum of Vertebrate Zoölogy, Berkeley, California, August 27, 1912.

[In reply to Mr. Grinnell's communication, the author of the editorial remarks on the A. O. U. Committee on Nomenclature and its functions, in 'Notes and News' of the July Auk, begs to say that while he is a member of the Committee, the remarks represented his own personal views on the matters discussed and may or may not reflect the opinions of the Committee as a whole. The same may be said of the following comments upon Mr. Grinnell's communication.

As to the question of classification raised by Mr. Grinnell, the writer feels that there is perhaps as much to be said on one side as the other. If there had been a generally recognized system available it would unques-

tionably have been adopted, but there was not; and the diversity of opinion among avian taxonomists still prevails. Furthermore it should be remembered that a Check-List is by no means necessarily a classification. Its very existence is for convenience, and so it is no light matter to overthrow a sequence, followed by practically all writers on North American birds for a quarter of a century, on the plea of being more scientific when we get nothing more stable than that which we discard.

As to the subspecies question with which Mr. Grinnell is chiefly concerned, we hardly think that he is serious in believing that a list of the binomial names in the present Check-List would answer the needs of the great bulk of the membership of the A. O. U. which he classes as 'amateurs' in matters of subspecific discrimination. He knows perfectly well that there are very many subspecies which are more easily distinguished than are certain species, and for these we must have names. For the purposes of ornithological investigation along any line - life history, habits, geographic distribution, migration, taxonomy, economics, etc. — we must have the birds of the country divided up into minor groups, species or subspecies as you will. The only question is, where shall we draw the line in recognizing the differentiation that nature has effected? The question is a practical one, just as the whole matter of naming is practical, and when we recognize by name differentiations so slight that an ornithologist cannot tell what bird he has before him until he submits it to a 'specialist in speciation' for study, then the process has gone too far for general purposes. There is however no test by which we can tell when we have gone too far. The problem is one entirely of degree in which personal opinion and individual ability enter into every case. As already stated the line cannot be drawn between the species and the subspecies, because by our Code they are distinguished not by degree of difference but by the criterion of intergradation. In an effort to fix this line the A.O.U. established the Committee believing that the vote of a Committee would represent the nearest approach possible to the desired result.

We do not believe that the efforts of the Committee have been so entirely unsatisfactory as Mr. Grinnell implies, except of course to 'students of speciation' who make a specialty of naming differentiations no matter how small, regardless of whether the results of their work can be utilized by specialists in the various other branches of ornithology. It was for the latter we think that the Check-List was conceived. It was surely never intended for such a 'specialist in speciation' as Mr. Grinnell predicts who would name every finest discernible differentiation and would if possible make 140 races of Song Sparrows out of the 20 now recognized. In European ornithology the same effort is evident in check-lists and catalogues to recognize practical subspecies but to reject those based in extremely slight differentiations, and this by ornithologists who can hardly be charged with catering to the amateur.

Mr. Grinnell will perhaps understand better the attitude of the large majority of ornithologists toward the subspecies if he will but consider

his own attitude toward the genus. He must use generic names in his 'speciation' researches but he has no inclination to halt the latter while he investigates generic taxonomy. Consequently he cheerfully accepts the opinions of the A. O. U. Committee on all generic problems and even goes so far as to say that this is a function in which "the great value of a committee of arbitration is beyond any possibility of dispute." In exactly the same spirit investigators in other fields of ornithology accept the decisions of the Committee in regard to subspecies. As a matter of fact the two problems are precisely similar and the opinion of the Committee is not one whit more valuable in deciding how many genera should be recognized than it is in the case of recognition of subspecies. However we are digressing from the point at issue. Mr. Grinnell charges that the Committee has been inconsistent — has gone too far in some cases and not far enough in others. This may readily be granted and right here lies the crux of the whole matter. How is the Committee to know when it has overstepped the line? How can any one judge of consistency in such matters? Subspecies are separated from one another by all possible degrees of difference and the whole question as before stated is one of individual opinion.

Mr. Grinnell's suggestion of a committee of one for each family or genus, as the case may be, does not appeal to the writer as practicable and he doubts whether the opinion of a selected specialist on Fringillidae, as to the number of recognizable races of *Melospiza* in California would be any more acceptable to Mr. Grinnell than are the opinions of the long-suffering Committee.

If any practicable plan can be devised however by which the work of the 'speciation specialist' may receive full recognition without impairing the utility of the Check-List for other specialists, the writer would give it his hearty support. And if the Committee could be relieved of the burden of passing upon the merits of the various proposed subspecies he feels sure that the proposition would be hailed with delight 'from seven different directions.'

Any departure along these lines however would necessitate a reconsideration of all the subspecies of the Check-List and could not be exploited until a new edition was demanded. Perhaps by that time a committee may be found which will undertake this task and divide the subspecies into two categories, (1) those regarded as of practical utility, as above explained; (2) those recognized by 'specialists on speciation'. Then we should have the entire history of each group before us. This would probably approach nearer to consistency than does the present Check-List, in which most of the inconsistency arises from the different attitude and different make-up of the Committee at the times at which the various cases were considered. This plan too would accord in a measure with Mr. Grinnell's suggestion except that the utility line would not be drawn between the species and the subspecies a proposal that as already explained is quite indefensible. And now just a word upon some remarks of Mr. Grinnell regarding the work of the Committee. He charges that the Committee has felt the necessity

of pleasing both the amateur and the specialist. In this the writer thinks he is mistaken. The Committee has tried to decide each subspecies case upon its merits regardless of how its opinion might affect any individual or class. Such inconsistencies as have resulted were unintentional and due to the lack of any standard in such matters — not to any feeling of obligation to anyone.

The only instance where the Committee has acted in deference to the views of amateur ornithologists — and scientific ones too as it happens — was in the withholding of nomenclatural opinions from the Sixteenth Supplement. This was done in view of the widespread disgust at 'name shuffling' and the diverse interpretation of Article 30 of the International Code, pending an opinion by the International Commission. It was thought far better to temporarily withhold decisions which might have to be reversed in a year or two.

Further on Mr. Grinnell adopts a rather unfortunate simile in discussing the Committee's work. He rightly contends that his judgment upon the validity of proposed new forms in a group of Middle American Humming-birds with which he was quite unfamiliar would not be worth much if based upon but a few days study. In the case of the Committee however he seems to forget that the members are fairly familiar with North American birds and that many of the races which modern 'speciation specialists' have honored with names were worked out but not named by members of the Committee years ago. Furthermore what knowledge one member of the Committee lacks another may possess so that the efforts of the Committee are certainly not seven times as ridiculous as the efforts of any one of them individually. In not a few cases moreover the Committee has had more material before it than had the describer of the proposed new race.

The writer welcomes Mr. Grinnell's communication because it shows the proper spirit of coöperation. Everyone will have different opinions on such matters as he has discussed and only by bringing them forward can we achieve results approximately satisfactory to all. The Committee certainly desires to produce satisfactory results and to raise the Check-List to the highest efficiency and if its methods are wrong the sooner the fact is demonstrated the better.

WITMER STONE.]

Aves in the International Catalogue of Scientific Literature.

THE EDITOR OF 'THE AUK':

Dear Sir: It has occurred to me that the accompanying table may be of some interest to your readers and may also incidentally be of assistance to the writer who is engaged in the task of compiling the 'Aves' portion of the Zoölogical Record and the International Catalogue of Scientific Literature. The Zoölogical Record which was founded nearly 50 years